WHAT IS CLAIMED IS:

1. A mold design system for designing a mold for use in molding a product, comprising:

two-dimensional projection means for producing two-dimensional projection data by projecting edges of a product shape represented by three-dimensional graphic data onto a plane perpendicular to a mold opening direction; and

parting line determination means for sequentially determining, out of candidate edges contiguous to a determined parting line already determined as parting line, a candidate edge forming a largest interior angle with said determined parting line at a contact point therewith on said two-dimensional projection data, as said parting line, whereby a parting line of said mold for molding said product shape is determined.

2. A mold design system according to claim 1, wherein said parting line determination means determines, out of edges within said two-dimensional projection data, an edge whose middle point is positioned farthest from a central point of said product, as a first parting line.

3. A mold design system according to claim 1, wherein said parting line determination means determines one of said candidate edges according to a number of intersections, when said candidate edge forming said largest interior angle with said determined parting line at said contact point therewith on said two-dimensional projection data crosses any other

candidate edge.

4. A mold design system according to claim 3, wherein said parting line determination means outputs a selection request to a user when said candidate edge forming said largest interior angle with said determined parting line at said contact point therewith on said two-dimensional projection data crosses any other candidate edge at least two points, and determines a selected one of said candidate edges as said parting line.

5. A mold design system according to claim 1, wherein if there exist a plurality of candidate edges forming said largest interior angle with said determined parting line at said contact point therewith, said parting line determination means detects, out of other end-connected edges contiguous to other end points of said plurality of candidate edges, one forming a largest interior angle with said determined parting line, and determines one of said candidate edges between said detected one and said determined parting line, as said parting line.

6. A mold design system according to claim 5, wherein if said parting line determination means is incapable of determining one of said candidate edges to be set to a parting line due to existence of a plurality of said other end-connected edges forming said largest interior angle with said determined parting line, said parting line determination means determines,

as said parting line, one of said plurality of said candidate edges forming said largest interior angle with said determined parting line at said contact point therewith, said one of said plurality of said candidate edges having a largest length of all said plurality of said candidate edges.

7. A mold design system according to claim 1, wherein if there exists a parallel edge parallel to said mold opening direction among said candidate edges, said parting line determination means deals with a maximum value of an interior angle between an other end-connected edge contiguous to another end point of said parallel edge and said determined parting line, such that said maximum value is an interior angle between said parallel edge and said determined parting line.

8. A mold design system according to claim 1, wherein if said determined parting line other than said first parting line exists among edges contiguous to another end point of said candidate edge forming said largest interior angle with said determined parting line at said contact point therewith, said parting line determination means prompts said user to correct said parting line instead of determining said candidate edge forming said largest interior angle with said determined parting line at said contact point therewith, as said parting line.

9. A mold design system according to claim 1, wherein if said candidate edge forming said largest interior angle with

said determined parting line at said contact point therewith crosses said determined parting line, said parting line determination means prompts said user to correct said parting line in stead of determining said candidate edge forming said largest interior angle with said determined parting line at said contact point therewith, as said parting line.

10. A mold design system according to claim 1, wherein said two-dimensional projection means generates said two-dimensional projection data including edges of said slide core, if a shape of said slide core is determined, and

wherein said parting line determination means carries out a parting line determining process while taking said edges of said slide core as well into account.

11. A computer-readable recording medium which stores a mold design program for use in designing a mold for molding a product,

the computer-readable recording medium causing a computer to function as:

two-dimensional projection means for producing two-dimensional projection data by projecting edges of a product shape represented by three-dimensional graphic data onto a plane perpendicular to a mold opening direction; and

parting line determination means for sequentially determining, out of candidate edges contiguous to a determined parting line already determined as parting line, a candidate

edge forming a largest interior angle with said determined parting line at a contact point therewith on said two-dimensional projection data, as said parting line, whereby a parting line of said mold for molding said product shape is determined.